Point Module XI—Saline Deposits on Agricultural Land

The collection of information on saline deposits is new in the 1997 National Resources Inventory.

Definition

Saline deposits. Precipitated salts or salt crusts resulting in eliminated crops or grass on agricultural lands.

Importance

Saline deposits impact the growth of crops for large portions of the Nation. Data on saline deposits provide the ability to monitor size of the areas.

Guidelines and Clarification

Data for saline deposits will be gathered on agricultural land in the following states:

Arizona	New Mexico
California	North Dakota
Colorado	Oklahoma
Idaho	South Dakota
Kansas	Texas
Montana	Utah
Nebraska	Wyoming
Nevada	

Data on saline deposits will be gathered on the following land cover/uses:

Cropland
Pastureland
CRP land

Data will be collected in agricultural areas that have visible salt deposits on the surface. Saline deposits in fields can be identified by the presence of spotty or continuous white crusty patches in areas where crops may grow. Saline areas may be salty white patches without cover interspersed with areas of crops or weeds.

Saline deposits include salts of sodium, calcium, potassium, and magnesium. The deposits can be the result of:

- Saline hillside seeps on nonirrigated cropland fields.
- Evaporative deposits on irrigated land.
- Evaporative deposits over shallow water mounds beneath intensively irrigated land in which capillary action brings dissolved salts to the surface.
- Localized deposits may also be the result of the spillage and evaporation of oil and gas field brines.

For 1997, saline deposit data are obtained for the area in which the point falls or the portion of the field surrounding the point that would be considered in conservation planning or the Conservation Treatment Unit (CTU). Toxic salt reduction, irrigation water management, and soil salinity management would be normal treatment needs options for the salt deposit areas.

At the CTU associated with the PSU point, determine the percentage of the field or CTU covered by salt deposits (either continuous or intermixed).

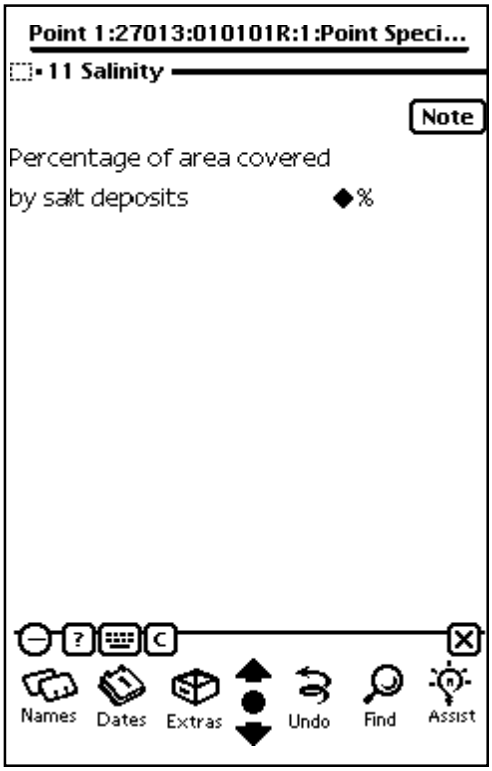
Documentation Required in PLU Folder

Delineate the area or areas of salinity on the PSU support map. Label them as **SA** on the support map for documentation and future reference.

Categories and Codes

Code	Percentage class
0	No saline deposits, zero percent of field or CTU
1	> 0.0 percent to 10 percent of field or CTU
2	>10 percent to 25 percent of field or CTU
3	> 25 percent to 50 percent of field or CTU
4	> 50 percent of field or CTU

PDA Instructions



From the choice list select the percentage class that represents the percentage of the field or CTU that is covered by salt deposits. Touch the stylus to the diamond on screen 11 and use the pull down menu to select the appropriate code.

Upon completion, tap the completion check box to verify data entry. Resolve any reported edit checks.

Example

A PSU point is located in a 25-acre field downslope from a center pivot irrigation system in an adjoining alfalfa field. The land cover/use for the point is pastureland. The field has some scattered brush and grass covering about 15 acres. White areas identified as saline deposits can be seen to cover approximately 10 of the 25 acres.

The estimated field area of the polygons is 40 percent. Since this is 40 percent of the field, the answer is Code 3, >25 percent to 50 percent of field or CTU. Touch PDA screen 11 Salinity on the diamond and use the pull down menu to select Code 3.

Point Module XI Glossary

(The following definitions were extracted from the 1997 Natural Resources Inventory Glossary.)

Hillside seeps. Locations on the slope where water extrudes from the ground and often forms a small pool. These areas are usually associated with small springs.

Irrigation water management. The determination and control of the rate, amount, and timing of irrigation water in a planned and efficient manner. The purpose is to effectively use available irrigation water supply in managing and controlling the moisture environment of crops to promote the desired crop response, to minimize soil erosion and the loss of plant nutrients, to control undesirable water loss, and to protect water quality.

Soil salinity management, non-irrigated. The management of land, water, and plants to control the